

**AMENDMENTS TO THE CLAIMS:**

Claims 17 and 52 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

Claims 1 through 16 (Canceled)

17. (Currently amended) A method of determining therapeutic activity and/or possible side-effects of a medicament, said method comprising:  
introducing a medicament to an organism; and  
determining a relative ratio of first nucleic acid and/or gene product thereof of an endosymbiont cellular organelle and [a] any second nucleic acid and/or gene product thereof of said organism in a sample obtained from said organism.

18. (Original) The method according to claim 17, wherein said introducing comprises introducing said medicament for at least three months.

19. (Previously presented) The method according to claim 17, wherein said medicament is used for treatment of a chronic disease.

20. (Previously presented) The method according to claim 17, wherein said introducing a medicament to said organism comprises introducing said medicament to an organism free from side-effects at a first time said medicament is introduced to said organism.

21. (Previously presented) The method according to claim 17, wherein said therapeutic activity comprises a therapeutic activity against an HIV-related disease and/or a

tumor-related disease.

22. (Previously presented) The method according to claim 17, wherein said medicament comprises a nucleoside and/or nucleotide analogue.

23. (Original) The method according to claim 22, wherein said nucleoside and/or nucleotide analogue comprises fludarabine, mercaptopurine, tioguanine, cytarabine, flurouracil, and/or gemcyatbine.

24. (Previously presented) The method according to claim 17, wherein said medicament comprises AZT, ddI, ddC, d4T, 3TC and/or tenofofir.

25. (Previously presented) The method according to claim 17, wherein said determining comprises determining said relative ratio prior to said introducing said medicament.

Claims 26 through 46 (Canceled)

47. (Previously presented) The method according to claim 17, wherein said relative ratio is determined in the same assay.

48. (Previously presented) The method according to claim 47, further comprising amplifying said first nucleic acid and/or gene product thereof and said second nucleic acid and/or gene product thereof in the same assay.

49. (Previously presented) The method according to claim 47, wherein said relative ratio is determined directly by dividing an amount of said first nucleic acid and/or gene product by an amount of said second nucleic acid and/or gene product.

50. (Previously presented) The method according to claim 47, wherein said relative

ratio is determined directly by dividing an amount of said second nucleic acid and/or gene product by an amount of said first nucleic acid and/or gene product.

51. (Previously presented) The method according to claim 47, wherein said relative ratio is determined by comparison with a reference curve.

52. (Currently Amended) The method according to claim 47, wherein said first nucleic acid and/or gene product thereof and said second nucleic acid and/or gene product thereof are obtained from a peripheral blood mononuclear sell cell and /or fibroblast.